

## **REMARKS**

Claims 1 and 2 remain in the application for consideration by the Examiner. Applicants respectfully request reconsideration and allowance of these claims for the following reasons.

The Office Action rejected claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by Shields (US 5,609,938). The Office Action stated that Shields discloses a pressure-sensitive adhesive sheet (col. 10, claim 1) and a pressure-sensitive adhesive layer (col. 10, ll. 19-21), having formed therein a plurality of through holes passing through from one surface to the other surface thereof (col. 7, ll. 19-22), and being liable to be subjected to a pressure of not less than 1 Pa (Fig. 2a, wherein the pressure is applied during attachment); the pressure-sensitive adhesive sheet characterized in that: said through holes have a diameter in said based material and said pressure-sensitive adhesive layer in the range of 0.1 to 300  $\mu\text{m}$ , and a hole density in a range of 30-50,000 per/ $\text{cm}^2$  (col. 7, ll. 19-22); and said pressure-sensitive adhesive layer has a storage modulus at 70°C of not less than  $9 \times 10^3$  Pa, and a loss tangent of 70°C of not more than 0.55 (col. 10, ll. 25-33; wherein the same material has the same properties) as required in Applicants' claim 1. Applicants respectfully traversed this rejection.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdengaal Bros. v. Union Oil Co. of California*, 814 F.2d 1051, 1053 (Fed. Cir. 1987), *cert. denied*, 484 U.S. (1987). Applicants respectfully submit that the teachings of Shields do not anticipate each and every element as set forth in claims 1 and 2, either expressly or inherently.

Applicants’ claim 1 defines a pressure-sensitive adhesive sheet comprising, *inter alia*, a pressure-sensitive adhesive layer having a storage modulus at 70°C of not less than  $9 \times 10^3$  Pa and a loss tangent at 70°C of not more than 0.55. Such structure and properties of the presently claimed invention are not described, nor inherent, in the teachings of Shields.

The Office Action never explained where the teachings of Shields teach a pressure-sensitive adhesive layer having a storage modulus at 70°C of not less than  $9 \times 10^3$  Pa and a loss tangent at 70°C of not more than 0.55. The Office Action cited Shields at column 7, lines 19-22; column 10, claim 1, lines 19-33; and Fig. 2a as teaching the presently claimed invention. However, these portions of Shields have absolutely no discussion therein concerning the storage modulus or loss tangent of the pressure-sensitive adhesive means (layer) described therein. Therefore, the Office incorrectly infers that the limitations in present claim 1, such

as a pressure-sensitive adhesive layer having a storage modulus at 70°C of not less than  $9 \times 10^3$  Pa and a loss tangent at 70°C of not more than 0.55, are somehow inherent within teachings of Shields. Applicants respectfully submit that these properties of the presently claimed pressure-sensitive adhesive layer are not and cannot be inherent from the teachings of Shields.

Those skilled in the art understand that a typical pressure-sensitive adhesive layer may not or would not have a storage modulus or loss tangent within the range set forth in the present claims due to differences in molecular structure (such as, molecular entanglement), which arises from the different types of monomers/polymers, compounding ratio, degree of polymerization, etc. The Office Action never addressed such understanding of the skilled artisan, making it impossible to establish inherency of the presently claimed invention based on the teachings of Shields.

The examples in the Specification demonstrate the presently claimed storage modulus and loss tangent of the pressure-sensitive adhesive layer are not and cannot be inherent within the teachings of Shields. Consider, for example, Examples 1, 2, and 3, Comparative Examples 1 and 2, and Table 1 on pages 20-25 in the Specification. The acrylic solvent type pressure-sensitive adhesives (made by Lintec Corporation, MF; and made by Lintec Corporation, PK) used in

Examples 1 and 2 result in pressure-sensitive adhesive layers having the loss tangent of present claim 1. However, the acrylic solvent type pressure-sensitive adhesive (made by Lintec Corporation, PL-2) used in Comparative Example 1 results in a pressure-sensitive adhesive layer not having the loss tangent of present claim 1.

Similarly, a rubber solvent type pressure-sensitive adhesive (made by Lintec Corporation, PV-2) used in Example 3 results in a pressure-sensitive adhesive layer having the loss tangent of present claim 1. However, a rubber solvent type pressure-sensitive adhesive (made by Lintec Corporation, PT-3) used in Comparative Example 2 results in a pressure-sensitive adhesive layer not having the loss tangent of present claim 1.

The adhesive layers in Examples 1, 2, and 3 and Comparative Examples 1 and 2 of the Specification evidence that pressure-sensitive adhesive layers supposedly within the broad discussion of pressure-sensitive adhesive layers within the scope of Shields may not or do not have the presently claimed loss tangent. In other words, the teachings of Shields cannot and do not establish that the pressure-sensitive adhesive layers therein necessarily have the presently claimed loss tangent at 70°C of not more than 0.55.

The fact that a certain result or characteristic *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic (*emphasis added*). *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993). To establish inherency, the extrinsic evidence must make it clear that the missing descriptive matter is *necessarily* present in the thing described in the reference. Inherency, however, may not be est. by probabilities or possibilities. *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). The mere fact that a certain thing may result from a given set of circumstances is not sufficient (*emphasis added*). *Ibid*.

The data in the Specification demonstrates that any particular pressure-sensitive adhesive layer may not or does not necessarily have the presently claimed storage modulus at 70°C of not less than  $9 \times 10^3$  Pa and a loss tangent at 70°C of not more than 0.55. Accordingly, these structures of Applicants' claimed invention cannot and are not inherent within the teachings of Shields within the meaning of 35 U.S.C. §102.

As mentioned above, those persons skilled in the art understand that a typical pressure-sensitive adhesive layer may not or would not have a storage modulus or loss tangent within the range set forth in the present claims due to differences in molecular structure (such as, molecular entanglement), which arises

from the different types of monomers/polymers, compounding ratio, degree of polymerization, etc. Since the teachings of Shields have no discussion therein concerning such molecular structure of the pressure-sensitive adhesive layer, these teachings cannot provide a reason to one of ordinary skill in the art to modify the teachings of Shields to the presently claimed pressure-sensitive adhesive layers having the presently claimed storage modulus or loss tangent within the meaning of 35 U.S.C. §103.

The data in Table 1 on page 25 of the present Specification is noteworthy for additional reasons. This data demonstrates that pressure-sensitive adhesive sheets having through holes form therein for which the pressure-sensitive adhesive layer has a storage modulus and a loss tangent, as presently claimed, easily eliminate air entrapment. This remarkable air entrapment removability of the presently claimed invention (Examples 1-6) is unexpectedly superior to that of Comparative Examples 1 and 2.

At least for these reasons, Applicants respectfully submit that claims 1 and 2 are patently distinguishable from the teachings of Shields within the meaning of 35 U.S.C. §102 or 35 U.S.C. §103. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the rejection set forth the outstanding Office Action over the teachings of Shields.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance and requests a timely notice to this effect. If questions relating to patentability remain, Applicants invite the Examiner to contact the undersigned by telephone.

Please charge any unforeseen fees that may be due to Deposit Account No. 50-1147.

Respectfully submitted,

/R. Eugene Varndell, Jr/  
R. Eugene Varndell Jr.  
Reg. No. 29,728

Posz Law Group, PLC  
12040 South Lakes Drive  
Suite 101  
Reston, VA 20191  
Phone 703-707-9110  
Customer No. 23400